



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT OFFICE
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IN REPLY REFER TO:

1792(116)
JITW EA
A8087(WHY:jl)

JUL 18 2003

Dear Interested Public:

The enclosed *Environmental Assessment* (EA) for the Jobs In The Woods Restoration Project is being advertised in the Medford Mail Tribune for a 20-day public review period. This proposal helps to restore watershed health by replacing one (1) undersized culvert (the new culvert is designed to withstand a 100 year flood event) and to decommission 0.1 miles of existing road. The decommissioning includes the removal of one existing culvert. The project proposal is located in the Yale and Beaver Creek area of the Applegate Watershed.

The primary purpose of a public review is to provide the public with an opportunity to comment on the Bureau of Land Management's determination that there are no significant impacts associated with the proposed action and, therefore, an environmental impact statement is not necessary.

This EA is published on the Medford District web site, www.or.blm.gov/Medford/, under "Planning Documents."

We welcome your comments on the content of the EA. We are particularly interested in comments that address one or more of the following: (1) new information that would affect the analysis, (2) information or evidence of flawed or incomplete analysis; and (3) alternatives to the Proposed Action that would respond to purpose and need. Specific comments are the most useful. Comments, including names and addresses, will be available for public review. Individual respondents may request confidentiality. If you wish to withhold your name and/or address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

All comments should be made in writing and mailed to Bill Yocum, Ashland Resource Area, 3040 Biddle Road, Medford, Oregon 97504. Any questions should be directed to the Ashland Planning Department at (541) 618-2384.

Sincerely,

Richard J. Dreihobl
Field Manager
Ashland Resource Area

Enclosure (as stated)

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
ASHLAND RESOURCE AREA

ENVIRONMENTAL ASSESSMENT

FOR

Jobs In The Woods Restoration Project
OR116-03-04

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ASHLAND RESOURCE AREA

EA COVER SHEET

Project Name/Number: Job In The Woods Restoration Project, OR-OR116-03-04

Location: Ashland Resource Area

List of Preparers	Title	Responsibility
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JOB IN THE WOODS RESTORATION PROJECT EA

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CHAPTER I: NEED FOR THE PROPOSAL AND PROJECT ALTERNATIVES

A. NEED FOR THE PROPOSAL

With the increase of population in southern Oregon and the increase of species listed with the Endangered Species Act the conditions of our forested landscapes are an important feature for watershed health and our quality of life. The roads in our uplands are a critical component dealing with impacts of watershed health.

This project helps to restore watershed health by replacing one (1) undersized culvert (the new culvert is designed to withstand a 100 year flood event) and to decommission 0.1 miles of existing road. The decommissioning includes the removal of one existing culvert.

B. CONFORMANCE WITH EXISTING LAND USE PLANS

The proposed activities are in conformance with and tiered to the *Medford District Record of Decision and Resource Management Plan* (RMP) (USDI 1995b) as amended by the *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (Amended Northwest Forest Plan) (USDI, USDA 2001). The Medford District Resource Management Plan incorporates the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* (NWFP) (USDA and USDI 1994). These documents are available at the Medford BLM office and the Medford BLM web site at <<http://www.or.blm.gov/Medford/>>.

C. RELATIONSHIP TO STATUTES, REGULATIONS, AND OTHER PLANS

The proposed action and alternatives are in conformance with the direction given for the management of public lands in the Medford District by the Oregon and California Lands Act of 1937 (O&C Act) and the Federal Land Policy and Management Act of 1976 (FLPMA).

D. DECISIONS TO BE MADE ON THIS ANALYSIS

This environmental assessment (EA) is being prepared to determine if the proposed action and any of the alternatives would have a significant effect on the human environment thus requiring the preparation of an environmental impact statement (EIS) as prescribed in the National Environmental Policy Act of 1969. It is also being used to inform interested parties of the anticipated impacts and provide them with an opportunity to comment on the various alternatives.

The Ashland Resource Area Field Manager must decide:

- Whether or not the impacts of the proposed action are significant to the human environment beyond those impacts addressed in previous NEPA documents. If the impacts are determined to be insignificant, then a Finding of No Significant Impact (FONSI) can be issued and a decision can be implemented. If any impacts are determined to be significant to the human environment, then an Environmental Impact Statement must be prepared before the Manager makes a decision.
- Whether to implement the proposed action alternative or defer to the no action alternative.

E. ISSUES OF CONCERN

The following issues were identified throughout the scoping process. Not every issue is analyzed in detail by this EA. All of the issues were reviewed by the ID Team.

- The spread of noxious weeds and other invasive non-native species.
- Impacts to Coho salmon, a threatened species.

F. PROPOSED ACTION ALTERNATIVE - Replace one (1) undersized culverts (not designed to withstand a 100 year flood event) and implement the transportation management objectives recommended by watershed analysis. This includes the decommissioning of 0.1 miles of existing road and closing the decommissioned road to vehicle use by the general public (see Site Location Maps). The following tables lists the locations and type of treatment proposed.

Pipe Arch Culvert	
General Location	Legal Description
Yale Creek	T40S R2W Section 3

Road Treatment Table		
Road Number	Approximate Length (miles)	Type of Treatment
40-3-12.3	0.1	Mechanical Decommission

G. PROJECT DESIGN FEATURES

Project Design Features are included for the purpose of mitigating or reducing anticipated adverse environmental impacts which might stem from the implementation of the proposed action alternative.

- In order to minimize the spread of weeds, all machinery capable of ground disturbance would be pressure washed prior to arriving at the contract area and prior to moving between job sites.
- To preclude the establishment of invasive, nonnative plant species, areas of newly disturbed mineral soil would be sown with native plant seed.
- The instream work period is from July 1 - September 15.
- At all stream crossings the approach should be as near a right angle to the stream as possible to minimize disturbance to streambanks and riparian habitat.
- Road crossings on all fish-bearing streams should be designed to **maintain natural streambed substrate and site gradient** where feasible, while minimizing longterm maintenance needs; the specific design should also be based on expected longevity and economics.
- **Width of a crossing structure** should be at least as wide as the mean bankfull width at the crossing site; to be measured by a qualified professional. A structure less than bankfull width will constrict high streamflow and increase water velocity, resulting in scour at the outlet (perching), little to no deposition of streambed substrate in closed bottom structures and possible velocity barrier to fish. Deviation to this general rule should be discussed by the ID Team before final project design and implementation..

- **Divert the stream around the work area** in a manner (e.g. a pipe or lined ditch) that will minimize stream sedimentation. Require the contractor to submit an approved plan for water diversion before instream work begins. The diverted stream should not be returned to the channel through the project area until all instream work has been completed. The resource area fish biologist should be consulted before deviating from this practice. If it is impractical to dewater a stream channel due to factors such as deep channel incision or high gradient, strongly consider scheduling the work toward the end of the instream work period, rather than at the beginning.

- **Reduce movement of sediment downstream** from the project site with the use of straw bales, geotextile fabric or coconut fiber logs/bales immediately downstream of the work area

- **Wet or green (wet: fresh enough to flow; green: hardened but less than 21 days old) cement**, new or old asphalt has acute and chronic adverse effects on aquatic life and should not be allowed to enter a stream. This includes water used to clean tools and wash out cement trucks after delivering material. Again, if the stream is dewatered before construction begins, aquatic species should be unaffected.

- To **restore streambed habitat complexity inside new crossing structures**, consider lining the bottom of the crossing structure with 1-3 foot diameter boulders. (The streambed is usually uniform following preparation of a new site or when replacing an existing pipe. Boulders that are placed in replacement pipes must be large (high) enough so that they are not buried by streambed substrate that may have been deposited immediately upstream of the inlet of the original pipe.) Use a prediction model to determine the size of boulder needed to ensure stability at the estimated 100 year peak flow.

- Carefully evaluate on a case-by-case basis the need to **maintain aquatic connectivity on non fish-bearing streams** to ensure upstream movement of other aquatic species.

- **Fill material over a stream crossing structure should be stabilized** as soon as possible after construction has been completed, normally before October 15. Work should be temporarily suspended if rain saturates soils to the extent that there is potential for environmental damage, including movement of sediment from the road to the stream.

- **Location of waste stockpile and borrow sites** should be at least one site potential tree length from a stream where sediment-laden runoff can be confined unless there is no way for sediment to move off-site. Using existing sites or creating new ones in Riparian Reserves must be consistent with the Northwest Forest Plan.

- The contractor should be notified that he is responsible for meeting all **state and federal requirements for maintaining water quality**. Standard contract stipulations should include the following:

- Heavy equipment should be inspected and cleaned if necessary before moving onto the project site in order to remove oil and grease, noxious weeds and excessive soil.
- Hydraulic fluid and fuel lines on heavy mechanized equipment must be in proper working condition in order to minimize leakage into streams.
- Waste diesel, oil, hydraulic fluid and other hazardous materials and contaminated soil near the stream should be removed from the site and disposed of in accordance with DEQ regulations. Areas that have been saturated with toxic materials should be excavated to a depth of 12 inches beyond the contaminated material or as required by DEQ.
- Equipment refueling would be conducted within a confined area outside the stream channel such that there is minimal chance that toxic materials could enter a stream.

- Use spill containment booms or other equipment as required by DEQ.
 - Equipment containing toxic fluids should not be stored in a stream channel anytime.
- Construct a **control weir** or **rock apron** at a culvert outlet as insurance that water velocity through a new culvert will not cause “perching”: (a) a “**control weir**” (log or boulders) is installed about 3 channel widths downstream of the culvert to back water into the pipe outlet (b) an **rock apron** consists of burying 1-3 foot diameter rock at the culvert outlet across the stream channel and downstream for a distance of 15 feet such that tops of boulders are the same elevation as the bottom of the culvert.

H. NO ACTION ALTERNATIVE

Under the “no action” alternative, no watershed restoration would be implemented: there would be no culvert replacements and no roads would be decommissioned and/or blocked.

CHAPTER II: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

A. FISH

The proposed actions include a culvert replacement on Yale Creek and a culvert removal and road decommissioning on Texter Gulch (see Table 1). The action on Yale Creek would upgrade the culvert to improve juvenile fish passage. On Texter Gulch, the proposed project would restore fish passage by removing a culvert and decommissioning a section of road (0.1 mile).

Table 1. Proposed activity and corresponding fish presence.

Stream name	Activity	Rationale	Fish species present	Distance to coho (miles)
Yale Creek	Culvert replacement	Juvenile fish passage and 100-yr flood	Steelhead, rainbow trout	7
Texter Gulch	Culvert removal	Fish passage	Cutthroat trout	3
	Road decommissioning			

Fish are present in both systems listed above. Yale Creek is a tributary to the Little Applegate River. The Little Applegate River and its tributaries support populations of ESA listed fish species. Southern Oregon/Northern California (SONC) coho salmon (*Oncorhynchus kisutch*) are listed as threatened under the Endangered Species Act (ESA). Klamath Mountain Province (KMP) steelhead (*O. mykiss*) was a candidate species for listing under the ESA however, in April 2001, the National Marine Fisheries Service (NMFS) ruled that the listing was not warranted. The status of coastal cutthroat trout (*O. clarki*) is under review by U.S. Fish and Wildlife Service. Other native species known to occur in the Applegate basin include chinook salmon (*O. tshawytscha*), sculpin (*Cottus* spp.), Klamath smallscale suckers (*Catostomus rimiculus*), and Pacific lamprey (*Lampetra tridentata*). Information on the distribution of sculpin, suckers, and lamprey in this drainage is incomplete.

Coho and chinook salmon spawn and rear in the lower Little Applegate below a falls that is a potential barrier to their migration. The falls is approximately 7 miles downstream of the project area. The barrier is a two-part chute, approximately 12 feet long that is only passable during periods of high flow. Steelhead negotiate this barrier in high flows, to spawn in Yale Creek. It is unlikely that coho negotiate these falls, and none have been observed above the falls since the 1950's (ODFW, BLM, Watershed Council). Rainbow and cutthroat trout occur in many tributaries upstream of the falls and are confirmed in Yale Creek.

Texter Gulch is a tributary to Beaver Creek which flows into the Applegate River. Cutthroat trout occur in Texter Gulch, below the culvert proposed for removal. Beaver Creek supports populations of coho, steelhead, rainbow trout, and cutthroat trout.

Yale Creek and Beaver Creek are “water quality limited” (“303(d) listed”) according to the Oregon Department of Environmental Quality (DEQ). Yale Creek is water quality limited for summer high temperatures. Beaver Creek is water quality limited for temperature, sedimentation, and biological criteria.

IMPACT ANALYSIS

Critical Habitat

Southern Oregon/Northern California (SONC) coho salmon (*Oncorhynchus kisutch*) is listed as a threatened species under the Endangered Species Act. On May 5, 1999, NMFS designated “Critical Habitat” for SONC coho [FR64(86):24049]. The distribution of coho salmon in the Little Applegate watershed is not well known. Coho salmon have not been observed above the falls in the last 15 years, however the possibility exists that coho can migrate above the falls in years with early fall flows. Coho presence has been confirmed to River Mile 1.5, about 5 miles downstream of Yale Creek. The only recorded siting of SONC coho salmon above this point was during 1951 (Personal communication, Chuck Fustish, Oregon Department of Fish and Wildlife). This observation is questionable, as no coho adults or juveniles have been observed above the barrier, however steelhead pass the “barrier” and coho should be able to negotiate the falls in years with early fall flows. In this case, coho may be able to use mainstream Little Applegate habitat as far upstream as the confluence with Glade Creek. Therefore, Yale Creek would be included in coho Critical Habitat.

Distribution of coho salmon extends up Beaver Creek, approximately 2.0 miles. A small dam that had been a barrier to coho migration was removed in the summer of 2002 and coho presence may now extend beyond this point. Snorkel surveys planned for the summer of 2003 will further assess coho distribution in Beaver Creek. The lower section of Texter Gulch is considered unoccupied coho critical habitat.

CRITICAL ELEMENTS

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order and must be considered in all EA’s.

Table 12: Critical Elements

Critical Element	Affected		Critical Element	Affected	
	Yes	No		Yes	No
Air Quality		✓ *	T & E Species		✓ *
ACECs		✓	Wastes, Hazardous/Solid		✓
Cultural Resources		✓	Water Quality		✓ **
Farmlands, Prime/Unique		✓	Wetlands/Riparian Zones		✓ **
Floodplains		✓	Wild & Scenic Rivers		✓

Critical Element	Affected		Critical Element	Affected	
	Yes	No		Yes	No
Nat. Amer. Rel. Concerns		✓	Wilderness		✓
Invasive, Nonnative Species		✓*	Environmental Justice		✓

*These affected critical elements could be impacted by the implementing the proposed action. Impacts are being avoided by project design.

**These affected critical elements would be impacted by implementing the proposed action. The impacts are being reduced by designing the proposed action with Best Management Practices, Management Action/Direction, Standard and Guidelines as outlined in the Environmental Impact Statements (EIS)/Record of Decisions (*RMP*) (*USDI BLM 1995*)(*USDA FS; USDI BLM 1994*) tiered to in Chapter 1. The impacts are not affected beyond those already analyzed by the above mentioned documents.

Only substantive site specific environmental changes that would result from implementing the proposed action or alternatives are discussed in this document. If an ecological component is not discussed, it should be assumed that the resource specialists have considered effects to that component and found the proposed action or alternatives would have minimal or no effects. General or "typical" effects from projects similar in nature to the proposed action alternative are also described in the documents to which this plan is tiered.

EFFECTS OF PROPOSED ACTION ALTERNATIVE

1. Wildlife Resources

Wildlife (Terrestrial)

Habitat immediately adjacent to the culverts to be replaced will be degraded or removed during culvert removal and reinstallation. Because only a small amount of habitat will be affected, and because much of the habitat will reestablish after the culverts are in place, the impact to terrestrial wildlife habitat will be minor.

Decommissioning the described road would have a long-term benefit to wildlife due to the decrease in vehicular traffic.

Those animals present in the immediate vicinity of the operations will be subject to short-term disturbance, but this also will be a minor impact.

Threatened/Endangered Species

Suitable habitat for proposed or listed threatened/endangered species will not be affected by the proposed projects.

2. Cultural Resources

A cultural survey was performed and the area has been cleared for operations.

3. Special Status and Threatened/Endangered Botanical Species

All proposed actions occur within the road prism. This greatly altered environment does not provide suitable habitat for BLM Special Status botanical species, including those listed or proposed under the Endangered Species Act of 1973. This project would have no effect on these species or their habitats.

4. Invasive, Nonnative Species

The proposed project will expose newly disturbed mineral soil. This will provide an environment that favors the invasive, nonnative plant species. Because of the presence of the noxious weed, *Centaurea solstitialis* (yellow starthistle), spread of this weed (and potentially others) is a concern. Effects from this project would be mitigated by project design features.

5. Fish

Proposed Action Alternative

The proposed activities will not negatively affect stream water temperatures in either of these streams.

Beaver Creek is water quality limited for sediment. Replacing culverts would contribute fine sediments to the stream during culvert removal and construction. Project Design Features (PDFs) and Best Management Practices (BMPs) would reduce the amounts of sediment generated by this project and seasonal restrictions would further reduce the negative impacts to fish because salmonid fry would have already emerged from the redds by the time this activity would occur. In the longterm, the risk of sediment impacts from future road blow-outs would be substantially reduced, providing a long-term benefit to the stream ecosystem and fish.

Fish passage would be restored at both sites. On Yale Creek, the culvert is being replaced because it is a barrier to juvenile migration especially during low flows. A bottomless arch would improve channel function and movement of aquatic organisms.

Upgrading culverts would have positive impacts on the soil and water resource by reducing actual and potential erosion, potential road failure, and the resulting stream sedimentation. Upgrading the existing drainage structures to withstand a 100 year flood event, allows for more efficient transport of streamflow and the associated sediment, bedload, and debris. This would minimize the risk of drainage structure failure. Undersized culverts can become plugged by coarse debris, and/or washed out by excessive streamflow which would damage roads and deliver high amounts of sediment to the streams. When culverts cannot contain a flood event, the stream may erode the road bed and streambank and consequently contributes large quantities of fine sediments into the stream. Fine sediments can clog spawning gravels, suffocate fish eggs or newly-hatched fry, eliminate winter habitat, and reduce the quality of aquatic insect habitat. Replacing culverts may create a short term pulse of sediment in the stream. However, sedimentation would either decrease (improve) after this initial flush of sediment is dispersed, or be maintained at its existing level, depending on existing road and stream conditions. Overall,

there should be a long-term decrease (improvement) in stream sedimentation rates in the areas where the proposed actions take place.

The proposed action would result the decommissioning of 0.1 miles within the Riparian Reserve. This would result in a decrease in road densities and a decreased source of sedimentation. Decommissioning roads within Riparian Reserves may briefly increase fine sediment input to the system. These actions however, are expected to reduce road-caused sedimentation over the longterm and allow riparian vegetation to recolonize the road surfaces. As trees grow up in the road bed, their roots loosen the compacted soil, restoring groundwater flow, thus improving the humid character of the riparian area. These trees also contribute organic material to the streams, provide shade, and increase potential large wood for eventual instream complexity.

No Action Alternative

Under this alternative there would be no upgrading of culverts or road decommissioning within the Riparian Reserve. Undersized, rusting and sagging culverts would continue to be at risk of failing during high flow events which could deliver high amounts of sediment to the streams. In addition, the existing culverts would continue to block fish passage. No improvement of the affected watersheds would occur at this time.

CHAPTER III: AGENCIES CONSULTED AND PUBLIC PARTICIPATION

A. CONSULTATION

- Oregon Department of Fish and Wildlife

B. PROFESSIONAL CONSULTATION

- Federal Highway Administration
- Medford BLM Road Maintenance

C. PUBLIC PARTICIPATION

1. Publicity

Public notice of the availability of this EA was provided through advertisement in the Medford Mail Tribune and the BLM Medford District's central registration and recording system.

2. Notification

A copy of the EA was mailed to the following organizations:

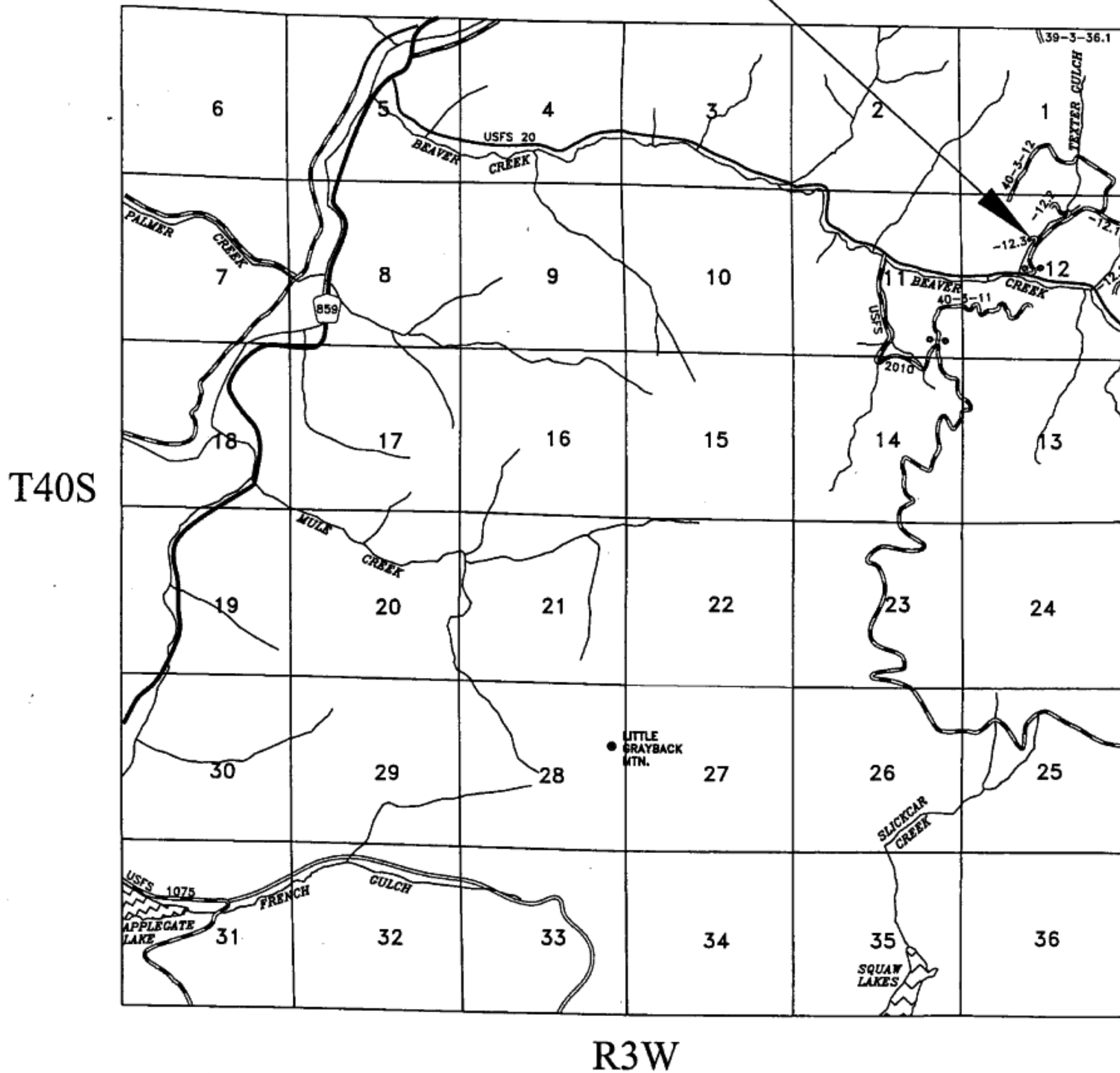
- Federally Recognized Tribes
- Oregon Department of Forestry
- Oregon Department of Fish and Wildlife
- Applegate River Watershed Council
- Association of O&C Counties
- Audubon Society
- Headwaters
- Klamath Siskiyou Wildlands Center
- Oregon Natural Resource Council
- The Pacific Rivers Council

3. Availability

A copy of this EA is available upon request from the Ashland Resource Area, Bureau of Land Management, 3040 Biddle Rd., Medford, OR 97540, (541)618-2384. The EA has also been placed in the Southern Oregon University Library and Jackson County Branch (Ruch) Libraries.

Texture Gulch
Site Location Map
T40S, R3W Section 12

Remove existing culvert
Decommission Road
Road 40-3-12.3



Yale Creek
Site Location Map
T40S, R2W Section 3

Road 40-2-3.4 MP 0.08
Replace existing culvert.

